

ABSTRACT

The present invention relates to a method of enlarging an image field of a camera by combining partial images. This method includes continuously rotating at least two refractive prisms such that an optical axis of the at least two prisms scans in a cycloidal pattern. Furthermore the method includes capturing a plurality of partial images. Finally, the cycloidal pattern is formed as an astroid pattern with a plurality of vertexes. The present invention further relates to an apparatus having a first refractive prism that is configured to rotate about an axis and a second refractive prism that is configured to rotate about the axis. The apparatus further includes a camera that captures a plurality of partial images. Finally, the first refractive prism and the second refractive prism form an optical axis that follows a cycloidal pattern. The instant abstract is neither intended to define the invention disclosed in this specification nor intended to limit the scope of the invention in any way.